

Turf Tips

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Winter Weed Control

For most areas of Districts 4 & 8, early September is the time to be applying fall preemergents for the control of annual winter weeds in home lawns, sports fields and on golf courses. One of the big reasons for poor weed control with the fall preemergent applications, is that individuals wait too late to make their treatments. Once the weed seed has germinated and the plant is growing, the majority of these preemergents will not control the weeds. The preemergents need to be applied before the weed seed starts to germinate. Note, there are two exceptions to this. The preemergent herbicides Simazine and Kerb both have postemergent activity as well as preemergent activity. These two products can be applied after many of the winter weeds have already started to germinate and grow and still provide effective winter weed control. Many of the commercial lawn care companies and landscapers use these products in their program. A second major reason for failure is not watering the herbicide in thoroughly. For these products to work, they need to be watered down into the top layer of the soil where most of the weed seed are germinating. Also, many of these herbicides are broken down by sunlight and if left on top of the turfgrass, they will lose some of their activity.

Preemergent herbicides are the most effective means for control of annual grassy weeds in turfgrasses. There is really not a real good option for controlling grassy weeds with a postemergent herbicide in the winter months. If the turfgrass is completely dormant, then you can use herbicides such as Glyphosate (Roundup) or Glufosinate – ammonium (Finale) for winter grassy weed control. However, for most of our winters, many of the turfgrasses being grown in home lawns and on sports fields and golf courses do not go completely dormant. Using one of these products when the turf is not completely dormant could cause severe injury to the turfgrasses.

Outlined below are some of the common preemergent herbicides being sold for use in turfgrasses. I have broken these down into two groups, products available to home owners and the products commonly used by commercial operators, sports field managers and golf courses. Note, some of these products may not be available in the different areas of district 4 & 8. My recommendation would be to take the time to visit some of your local nursery and retail stores to see what is available in your counties.

A. Preemergent for homeowner use (nursery and retail outlets)

Company	Trade Name	Common Name
Green Light	Amaze Grass and Weed Preventer	benefin and oryzalin
Green Light	Betasan Crabgrass Preventer	bensulide
Vigoro	Preemergent Crabgrass & Weed Control	dithopyr
The Scotts Company	Halts Crabgrass Preventer	pendimethalin
PBI/Gordon, Inc.	Betasan	bensulide
Green Light	First Down Granules	benefin and trifluralin
Green Light	Portrait Broadleaf Weed Preventer*	isoxaben
Fertilome	Fertilome Winterizer & Weed Preventer	simazine

* For annual broadleaf weeds only

B. Commercial preemergent herbicides

Company	Trade Name	Common Name
Dow AgroSciences	Dimension	dithopyr
BASF, Lesco	Pre-M, Pendulum 60 WP, Pre-M 3.3 EC	pendimethalin
Dow AgroSciences	Surflan	oryzalin
Dow AgroSciences	Barricade	prodiamine
Dow AgroSciences	Kerb	pronamide
Dow AgroSciences	Princep	simazine
Dow AgroSciences	Gallery	isoxaben
Bayer	Ronstar*	oxadiazon
PBI/Gordon, Inc.	Betasan	benusilde

* Not for use in home lawns

Early fall is also the time to make postemergent herbicide applications for the control of winter broadleaf weeds. The key to controlling these winter broadleaf weeds is to treat for them when they are young and actively growing in the fall to early winter months. If you wait until late spring when temperatures are warm enough to obtain good herbicide activity, then these winter broadleaf weeds will be very mature and much more difficult to control. Many of these winter broadleaf weeds will start to germinate in mid to late September, when night time temperatures start to cool down and rainfall occurs. Outlined below are some of the common postemergent herbicides sold for control of broadleaf weeds in home lawns, sports fields and on golf courses. Again, I have broken the postemergent herbicides into two different groups. Again, this is a small selection of what's available for broadleaf weed control. Ever wonder why there is so much confusion in chemical selection these days. Also, always remember to advise whomever the importance of reading the label before purchasing and again before using the herbicide.

A. Postemergent herbicides for homeowner use

Company	Trade Name	Common Name
Green Light	Wipe-Out Broadleaf Weed Killer	2,4-D, MCP, dicamba
Ortho	Weed-B-Gon Weed Killer for Lawns	2,4-D, MCP, dicamba
Ortho	Wed-B-Gon for Southern Lawns	2,4-D, MCP, dicamba
Ortho	Weed-B-Gon Lawn Weed Killer	2,4-D, MCP, dicamba
Ortho	Chickweed & Clover Control	MCP
Fertilome	Weed-Out Lawn Weed Killer	2,4-D, MCP, dicamba
PBI/Gordon, Inc.	Trimec Classic, Southern	2,4-D, MCP, dicamba
Spectricide	Weed Stop	2,4-D, MCP, dicamba



B. Commercial postemergent herbicides

Company	Trade Name	Common Name
Dow AgroSciences	Confront	triclopyr + clopyralid
Dow AgroSciences	Lontrel	clopyralid
Dow AgroSciences	Turflon	triclopyr
Lesco, Inc.	Momentum	2,4-D, triclopyr, clopyralid
Lesco, Inc.	Three-Way Ester II Selective Herbicide	MCPA, triclopyr, dicamba
Lesco, Inc.	Three-Way Selective Herbicide	2,4-D, MCPP, dicamba
Lesco, Inc.	Lesco 4-AD	2,4-D
Lesco, Inc.	Lesco Eight-One	2,4-D + dicamba
PBI/Gordon, Inc.	Trimec Classic	2,4-D, MCPP, dicamba
PBI/Gordon, Inc.	Trimec Plus	MSMA, 2,4-D, MCPP, dicamba
PBI/Gordon, Inc.	Trimec Encore	MCPA, MCPP, dicamba
PBI/Gordon, Inc.	Trimec Southern	MCPP, 2,4-D, dicamba
Riverdale, Inc.	Corsair	chlorsulfuron
Riverdale, Inc.	Manor	metsulfuron methyl
Riverdale, Inc.	Millennium Ultra	2,4-D, clopyralid, dicamba
Riverdale, Inc.	Cool Power	MCPA, triclopyr, dicamba
Syngenta	Reward	diquat
UHS	Chaser	2,4-D, triclopyr
PBI/Gordon, Inc.	SpeedZone	2,4-D, MCPP, dicamba, carfentrazone-ethyl
PBI/Gordon, Inc.	SpeedZone St. Augustinegrass Formula	2,4-D, MCPP, dicamba, carfentrazone-ethyl
PBI/Gordon, Inc.	PowerZone	MCPA, MCPP, dicamba, carfentrazone-ethyl

Fall Fertilization

Fall is the ideal time to fertilize both warm season turfgrasses and especially the cool season turfgrasses. For most areas of districts 4 and 8, early to late October is the ideal time to apply your fall application of fertilizer. It is in the fall that turfgrasses are producing and storing the largest amount of carbohydrates. The longer the grass stays green and growing in the fall, the longer the turfgrass plants will be able to produce these stored carbohydrates.

Unless you have a soil test report that indicates a different need, I still recommend using a 4-1-2 type ratio fertilizer for the fall application. However, I think most people are aware that many of our native soils are very high in phosphorus as well as potassium. For these soils, you do not need to apply phosphorus in the fall application. However, at this stage I still would recommend using a fertilizer with some potassium in the fertilizer application. Research work conducted by Texas A&M, Auburn University and North Carolina State University demonstrated that application of nitrogen only in the fall could lead to increase winter kill of the warm season turfgrasses. Until we can generate some research data that shows a nitrogen only fertilizer application in the fall will not cause problems, I am reluctant to recommend nitrogen only in the fall. Note, Ronnie Leps in Williamson County and I are currently conducting a three year fertility study on St. Augustinegrass and bermudagrass to evaluate four different fertilizer ratios. By the end of this three year study, we should have a better answer to which fertilizer ratio is best for the central Texas areas.

If the application is made in mid to late October, there is no need to use a slow release nitrogen source. First, you don't have that much growing time left to use the nitrogen fertilizer and secondly, due to the cooler night time temperatures and the longer hours of dark, you can't force rapid vertical growth on the warm season turfgrasses at this time of the year.

If a warm season turfgrass is overseeded with one of the cool season turfgrasses such as perennial ryegrass, then it will be necessary to fertilize the ryegrass in late November to early December and then again in late February with a nitrogen only fertilizer source. Apply approximately 1.0 pound of nitrogen per 1,000 sq.ft. using an all soluble nitrogen fertilizer.

Fall Irrigation

Fall is the time when the warm season turfgrasses are preparing for the winter dormancy period. It is very important to provide the best possible growing conditions for these grasses at this time of the year. This includes proper irrigation. Continue to water the turf on a regular schedule until the turfgrasses have gone dormant. Usually in the fall once or twice per week with a total of one inch of water per week is sufficient to grow good turfgrasses at this time of the year. Remember, if adequate rainfall occurs it will not be necessary to water during that period of time. Also, remember to advise individuals of the importance of not watering during the early evening and night time hours. If you maintain wet foliage throughout the night in the fall, you will encourage disease problems such as brown patch.

Overseeding

While I do not encourage homeowners to overseed their home lawns in the fall, many homeowners do overseed so they can have a green lawn year around. Note, I do recommend overseeding for sites where sporting events such as soccer, baseball and softball will be played. Overseeding is very hard on the warm season turfgrasses and can create some real big problems for transition of the lawns the following spring.

Outlined below are the recommended guidelines for successful overseeding of warm season turfgrasses in the fall.

- ✓ The best time to overseed the warm season turfgrasses in central to north Texas is early October (North Texas areas) to late October (central Texas areas). Problems associated with overseeding too early include; increase chance of disease activity such as pythium and heavy competition from the warm season turfgrass during the establishment period. Problems with overseeding too late include losing the newly germinated seedlings to an early freeze.
- ✓ The best cool season turfgrass for overseeding is one of the perennial ryegrasses. This is especially true if you are talking about overseeding for sports fields and golf course fairways and tee boxes. Some individuals still use the annual ryegrasses for overseeding. The annual ryegrasses do not perform as well as the perennial ryegrasses. However, if you are overseeding a St. Augustinegrass lawn (I really discourage anyone from doing this), then an annual ryegrass will work better than the perennial ryegrass. Due to the more vertical growth habit of the annual ryegrass, it will grow through the St. Augustinegrass faster and form a green stand of turf. Also, because the annual ryegrasses die out faster in the heat, they will not cause as many problems with spring transition.
- ✓ For home lawns, seed the perennial ryegrass at 5 to 7 pounds per 1,000 sq.ft.. For soccer fields and the infield areas of baseball fields, seed at 10 to 12 pounds of perennial ryegrass. For the outfield area of a baseball or softball field, use 7 to 8 pounds of perennial ryegrass per 1,000 sq.ft.
- ✓ Prior to applying the cool season grass seed in the fall, it is necessary to scalp the warm season turfgrass down as low as possible. A key to obtaining a good stand of ryegrass is to make sure the seed come in contact with the soil. This will increase the percent of seed germination and survival. Also, any seed that germinates up in the mat of turf, will likely be killed when the first good freeze occurs. Seed germinating up in the mat of turfgrass can easily be pulled up by the mower the first few times you mow the new overseeding, thus thinning out the stand of ryegrass.
- ✓ At the same time the seed is applied, apply a complete fertilizer such as a 15-5-10 or similar analysis. Note, if soil test indicate the native soil is low in phosphorus, then use a 1-1-1 or 1-2-1 ratio fertilizer. Apply the fertilizer at about 1.0 pound of nitrogen per 1,000 sq.ft.

- ✓ As soon as the seed are applied, start watering the site. It is very important to not let the seed become dry once you have started watering the site. Once the germination process starts, if the seed are allowed to become dry, they will die very quickly.
- ✓ As soon as the overseeded grass reaches the desired mowing height, then start mowing the site on a regular basis. Mowing heights can vary depending on where the ryegrass is planted. For home lawns a height of 1.5 to 2.0 inches will work fine. For most sports fields, a height of 0.75 to 1.0 inches generally works fine.

Fall Diseases

Outlined below are some of the common fall disease problems that can occur on turfgrasses in home lawns, sports fields and on golf courses.

- ✓ Brown patch (*Rhizoctonia solani*) – while this particular disease is found mostly in St. Augustinegrass lawns in the fall, it can also be found in centipedegrass, zoysiagrass and bermudagrass lawns in the fall. Note, it is very rare to see brown patch in bermudagrass, especially in a home lawn situation. Brown patch becomes active when night time temperatures drop below 70° F and day time temperatures are in the 80 to 85° F range. Brown patch is also associated with overwatering and/or heavy rainfall. Application of a herbicide, especially the hormone type herbicides, can increase the activity of the brown patch. Also, over application of a soluble nitrogen source can also increase the activity of the brown patch.
- ✓ Gray Leaf Spot (*Piricularia grisea*) – is primarily a disease problem of St. Augustinegrass in the south. This disease can be active in late spring and early summer, but also can be a problem in late summer to early fall. Symptoms for Gray Leaf Spot include lesions with blue-gray centers with slightly irregular brown margins that are in turn bordered by a ring of chlorotic tissue. I have seen quite a lot of Gray Leaf Spot activity in the last couple of seasons and have seen several St. Augustinegrass lawns that have lost areas due to Gray Leaf Spot. If Gray Leaf Spot is active in the lawn, it is very important to not apply a nitrogen fertilizer until the disease is brought under control with a fungicide application. Adding nitrogen to Gray Leaf Spot greatly enhances the activity of this particular pathogen.
- ✓ Take-All Root Rot (*Gaeumannomyces graminis* var. *graminis*) – while this pathogen has been found in all the warm season turfgrasses, it is largely a problem in St. Augustinegrass lawns. Also, while the visual symptoms for this particular disease show up in the late spring to summer period, the disease is actually active in the soil in the fall and spring months when soil temperatures are at 60 to 65° F. According to the plant pathologists, the best time to treat for this disease is in the fall or spring when the disease first starts actively feeding on the root system of the turfgrasses. If you wait until the summer months when the visual symptoms first appear, it is usually too late to treat. At this time researchers have had very little success with fungicide treatments for Take-All Root Rot. Note, there are several Take-All Control Studies being conducted at this time and hopefully there will be a chemical control discovered for this problem. Meanwhile, Dr. Phil Colbaugh, research plant pathologist at the Dallas Center, has demonstrated that applying a composted cow manure product (HuMore) at approximately 250 to 400 lbs./1,000 sq.ft. provides the best recovery from this disease problem.

Outlined below are two lists of fungicides for the control of turfgrass diseases. The first table list those products that can be found in garden stores and other retail outlets, while the second table contains the common commercial fungicides used by commercial lawn care operators and landscapers. As with the herbicides, all products may not be found in your counties. Again, it might be worth your time to visit a few of these stores to see what is available.



A. Common fungicides for homeowner use

Company	Trade Name	Common Name
Green Light	Broad Spectrum Mancozeb Fungicide	mancozeb
Green Light	Systemic Fungicide Disease Control	thiophanate-methyl
Green Light	Green Light Liquid Fungicide	PCNB
Green Light	Green Light Terraclor Granules	PCNB
Green Light	Maneb Plus	mancozeb
Fertilome	Fertilome Liquid Systemic Fungicide	propiconazole
Fertilome	Fertilome Halt	thiophanate-methyl
Hi-Yield	Maneb Lawn & Garden Fungicide	mancozeb
Hi-Yield	Hi-Yield Terraclor 75 WP	PCNB
Hi-Yield	Hi-Yield Lawn Fungicide Granules	PCNB
Scotts	Scotts Lawn Disease Preventer	PCNB
Scotts	Lawn Fungus Control	thiophanate-methyl
Scotts	Fungicide VII	triamefon
Spectracide	Spectracide Immunox Fungicide	myclobutanil
Spectracide	Spectracide Immunox Plus	myclobutanil
Acme	Fore Lawn & Ornamental Fungicide Spray	mancozeb
Bayer	Bayleton	triadimefon
Lesco	Bayleton System Fungicide	triadimefon

B. Common commercial fungicides

Company	Trade Name	Common Name
Bayer	ProStar	flutolanil
Bayer	Aliette Signature	fosetyl-AI
Bayer	Chipco 26 GT	iprodione
Cleary	Defend	PCNB
Cleary	Protect T/O	mancozeb
Cleary	Cleary's 3336	thiophanate-methyl
Dow AgroSciences	Rubigan A.S.	fenarimol
Dow AgroSciences	Eagle WSP	myclobutanil
Griffin	Junction	mancozeb
Lesco	Revere	PCNB
Lesco	Mancozeb	mancozeb
Lesco	Cavalier	thiophanate-methyl
UHS	Engage	PCNB
Uniroyal	Turfcide	PCNB
Uniroyal	Turfcide 400	PCNB
Uniroyal	Terrazole	etridiazole
Scotts	Penstar	PCNB
Scotts	Koban	etridiazole
Scotts	Fungicide X	iprodione
Scotts	Pythium Control	metalaxyl
Scotts	Golden Eagle	meclobutanil
Scotts	Fungo Systemic Fungicide	thiophanate-methyl
Syngenta	Heritage	azoxystrobin
Syngenta	Subdue Maxx	metalaxyl
Syngenta	BannerMaxx	propiconazole
Riverdale	Patchwork	fenarimol
PBI/Gordon, Inc.	Formec 80	mancozeb
Syngenta	Daconil Ultrex, Daconil Weather Stik	chlorothalonil
Olympic	Compass	trifloxystrobin

Common turfgrass diseases and recommended control

Turfgrass Disease	Control
1. Brown patch	PCNB, flutolanil, azoxystrobin, iprodione*, mancozeb, myclobutanil, propiconazole, thiophanate-methyl, trifloxystrobin
2. Gray Leaf Spot	azoxystrobin, chlorothalonil*, propiconazole, trifloxystrobin
3. Take-All Root Rot	azoxystrobin, fenarimol, propiconazole, trifloxystrobin
4. Helminthosporium (leaf spots)	chlorothalonil*. Iprodione*, myclobutanil, thiophanate-methyl mancozeb, azoxystrobin, trifloxystrobin

* Not labeled for use on turfgrasses in home lawns